AMENDMENTS TO THE CLAIMS

Please cancel Claim 30, without prejudice.

Please amend Claims 1, 7, 9-13, 17, 24, 31-41 and 45.

Please add Claims 46-50.

1. (Currently amended) A method of configurably profiling data comprising ~~the steps of~~:

receiving data from an input data stream;

pre-processing the received data by performing configurable first calculations thereon to create data relating to profiling features;

~~summarising~~ summarizing the profiling features data over a length of time, wherein the summarizing comprises i) dividing the length of time into a number of non-overlapping time-slots, ii) storing the profiling features data in one or more of the time-slots according to time information associated with or included in the profiling features data, and ~~by~~ iii) performing configurable second calculations ~~thereon~~ on the profiling features data to create ~~summarised~~ summarized data relating to profiled features; and

~~post-processing~~ post-processing the summarized profiled features data by performing configurable third calculations thereon to create a profiled output data stream for further processing.

2. (Original) A method according to claim 1, wherein the pre-processing includes receiving feedback data, which is used in the first calculations to create the data relating to profiling features, wherein the post-processing creates the feedback data from the third calculations.

3. (Original) A method according to claim 1, wherein the first calculations comprise applying a linear calculation to one or more sub-streams of the data.

4. (Original) A method according to claim 3, wherein the linear calculation does not alter the data.

5. (Original) A method according to claim 1, wherein intermediate results of the first calculations are temporarily stored for use in further first calculations.

6. (Original) A method according to claim 1, wherein each profiling feature is reconfigurably flagged as changed or unchanged to indicate whether or not the input data stream has changed from a previous input.

7. (Currently amended) A method according to claim 1, wherein the ~~behaviours~~ behaviors of the profiling features data are ~~summarised~~ summarized over ~~a number of non-overlapping time slots~~ the time-slots, and wherein the time-slots are of configurable length.

8. (Original) A method according to claim 1, wherein profiling features data independent of start and end times of events are stored in a scratch pad memory.

9. (Currently amended) A method according to claim ~~7~~1, wherein the profiling feature data is stored in one of the time-slots that corresponds with when an event that caused the profile to be updated started or ended.

10. (Currently amended) A method according to claim ~~7~~1, wherein the profiling feature data is stored in every time-slot during which the event was in progress.

11. (Currently amended) A method according to claim ~~7~~1, wherein each new instance of data falling within ~~a time slot~~ one of the time-slots overwrites data already in that ~~time slot~~ time-slot.

12. (Currently amended) A method according to claim 7, wherein the data in the ~~time slots~~ time-slots is accumulated.

13. (Currently amended) A method according to claim ~~7~~1, wherein the ~~time slots~~ time-slots are configured to wrap, such that if an update to the profiling features goes beyond the end of the ~~last (most recent) slot~~ time-slot, it wraps around to the ~~first (oldest) slot~~ time-slot and overwrites the data and creates an event message.

14. (Original) A method according to claim 1, wherein an event message is created when the profiler receives its first input.

15. (Original) A method according to claim 14, wherein the second calculations include using event messages to trigger specified rules.

16. (Original) A method according to claim 1, wherein event messages form part of the data relating to profiled features for post-processing.

17. (Currently amended) A method according to claim ~~7~~8, wherein the data relating to profiled features comprises information in the ~~time slots~~ time-slots and scratch page memory.

18. (Original) A method according to claim 1, wherein the third calculations include identifying potential indicators of the event sought.

19. (Original) A method according to claim 1, wherein the third calculations include preparing the output data stream for further processing to identify indicators of the event sought.

20. (Original) A method according to claim 1, wherein intermediate results of the third calculations are temporarily stored for use in further third calculations.

21. (Original) A method according to claim 1, wherein each output data feature is reconfigurably flagged as changed or unchanged to indicate whether the profiled data stream has changed from a previous input or not.

22. (Original) A method according to claim 1, wherein the data is profiled to detect possible instances of fraud.

23. (Original) A method according to claim 22, wherein the method is for use with a fraud detection system.

24. (Currently amended) A configurable data profiling system comprising:

a pre-processor arranged to receive an input data stream, the pre-processor also configured to perform configurable first calculations on the input data to create data relating to profiling features;

a profiler configured to ~~summarise~~ summarize the profiling features data over a length of time according to configurable second calculations to create ~~summarised~~ summarized data relating to profiled features, wherein the length of time is divided into a number of non-overlapping time-slots, and the profiler comprises a memory configured to store the profiling features data in one or more of the time-slots according to time information associated with or included in the profiling features data; and

a post-processor configured to perform configurable third calculations on the summarized profiled features data to create profiled output data for further processing.

25. (Original) A system according to claim 24, wherein the pre-processor is arranged to receive feedback data and perform the first calculations on the input and feedback to create the data relating to profiling features, wherein the post-processor is configured to perform configurable third calculations on the profiled features data to create the feedback data and the

profiled output data, wherein the system further comprises a means for providing the feedback data to the pre-processor.

26. (Original) A system according to claim 24, wherein the pre-processor is configured to apply a linear calculation to one or more sub-streams of the input and feedback data.

27. (Original) A system according to claim 24, wherein the pre-processor comprises a temporary storage for storing intermediate results of the first calculations.

28. (Original) A system according to claim 24, wherein the pre-processor comprises means for reconfigurably flagging to the profiler whether each profiling feature is as changed or unchanged.

29. (Original) A system according to claim 24, wherein the profiler comprises a memory for storing profiling features data independent of start and end times of events.

30. (Cancelled)

31. (Currently amended) A system according to claim ~~30~~24, wherein the plurality of non-overlapping ~~time-slots~~ time-slots are configured to store the ~~summarised behaviours~~ summarized behaviors of the profiling features data.

32. (Currently amended) A system according to claim ~~29~~24, wherein the profiler is configured to store the ~~summarised behaviours~~ summarized behaviors of the profiling features data in one of the time-slots that corresponds with when an event that caused the profile to be updated started or ended.

33. (Currently amended) A system according to claim ~~29~~24, wherein the profiler is configured to store the ~~summarised behaviours~~ summarized behaviors of the profiling features data in every time-slot during which the event was in progress.

34. (Currently amended) A system according to claim ~~29~~24, wherein the profiler is configured to store the ~~summarised behaviours~~ summarized behaviors of the profiling features data in a ~~time slot~~ time-slot by overwriting data already in that ~~time slot~~ time-slot.

35. (Currently amended) A system according to claim ~~29~~24, wherein the profiler is configured to store the ~~summarised behaviours~~ summarized behaviors of the profiling features data in a ~~time slot~~ time-slot by accumulating a new instance of the data with data already in the ~~time slot~~ time-slot.

36. (Currently amended) A system according to claim ~~30~~24, wherein the ~~time-slots~~ time-slots are configured to wrap, such that if an update to the profiling features goes beyond the end of the ~~last (~~most recent~~) slot~~ time-slot, it wraps around to the ~~first (~~oldest~~) slot~~ time-slot and overwrites the data and creates an event message.

37. (Currently amended) A system according to claim ~~29~~24, wherein the profiler is configured to create an event message when the profiler receives its first input.

38. (Currently amended) A system according to claim ~~24~~34, wherein the second calculations include using event messages to trigger specified rules, the event messages forming part of the data relating to profiled features for post-processing.

39. (Currently amended) A system according to claim 2924, the profiler is configured to pass information in the start and end time independent memory and time slot memory to the post-processor as part of the profiled features data.

40. (Currently amended) A system according to claim 24, wherein the post-processor is configured to perform the third calculations by identifying potential indicators of the event sought.

41. (Currently amended) A system according to claim 24, wherein the post-processor is configured to perform the third calculations by preparing the output data stream for further processing to identify indicators of the event sought.

42. (Original) A system according to claim 24, wherein the post-processor comprises a temporary storage for storing intermediate results of the third calculations.

43. (Original) A system according to claim 24, wherein the post-processor comprises means for reconfigurably flagging in the output data stream whether each profiled feature is changed or unchanged.

44. (Original) A system according to claim 24, wherein the system is for use with a fraud detection system.

45. (Currently amended) A system for configurably profiling data comprising:

means for receiving data from an input data stream; means for pre-processing the received data by performing configurable first calculations thereon to create data relating to profiling features;

means for ~~summarising~~ summarizing the profiling features data over a length of time, wherein the summarizing means comprises i) means for dividing the length of time into a number of non-overlapping time-slots, ii) means for storing the profiling features data in one or more of the time-slots according to time information associated with or included in the profiling features data, and ~~by~~ iii) means for performing configurable second calculations ~~thereon~~ on the profiling features data to create ~~summarised~~ summarized data relating to profiled features; and

means for ~~post-processing~~ post-processing the profiled features data by performing configurable third calculations thereon to create a profiled output data stream for further processing.

46. (New) A method according to claim 1, wherein the output data stream is sent to a fraud detection engine for conducting fraud detection based on the output data stream and wherein the fraud detection engine comprises one or more of a rule-based engine, a scorecard, or a change-detection engine.

47. (New) A method according to claim 1, wherein further analysis is performed on profiling features data with the time-slots to which the profiling features data is allocated.

48. (New) A method according to claim 1, wherein the profile output data stream comprises each of the summarized profiling features data from each of the time-slots along with post-processed summarized profiling features data from each of the time-slots along with event data.

49. (New) A method according to claim 1, wherein the summarizing processing and/or post-processing process occur only for data that has been changed.

50. (New) A system according to claim 24, wherein feedback data is provided from the post-processor to the pre-processor.